## Findings for the Alaska Board of Game 2012-197-BOG

## Units 9B, 17, 18, 19A, and 19B (Mulchatna Caribou Herd) Intensive Management Supplemental Findings March 9, 2012

The Board of Game finds as follows: based on information provided by Department staff, Alaska residents, and users of caribou in Subunits 9B, 17B, 17C, 19A, and 19B. These findings are supplemental to the findings set forth in 5AAC 92.108 and 92.125.

- 1. The Mulchatna Caribou Herd (MCH) in Units 9B, 17, 18, 19A, and 19B has been identified by the Board as a herd that is important for providing high levels of human consumptive use. The Board established an intensive management population objective of 30,000 80,000 caribou and an intensive management harvest objective of 2,400 8,000 caribou annually for the MCH.
- 2. The most recent minimum population size estimate for the MCH indicates that the herd contained between 30,000 and 40,000 caribou in 2008, which is at the lower limit of the intensive management population objective of 30,000 80,000 caribou.
- 3. The harvestable surplus of MCH caribou in Units 9B, 17, 18, 19A, and 19B, as described in 5 AAC 92.106(3)(A), is currently estimated to be 1,050 caribou annually, which is less than intensive management harvest objective established by the Board of 2,400 8,000 caribou annually.
- 4. The cause of the decline of the MCH caribou population in Units 9B, 17, 18, 19A, and 19B is not known with certainty but was likely due to weather-related and/or density-dependent factors that resulted in range limitations and disease that caused low pregnancy, low calf production and low calf survival. The poor recruitment also affected a shift in the population's age structure toward older-aged individuals that was not conducive for population growth. The density-dependent factors affecting population growth have become less important in limiting population growth as the number of MCH has declined to 15% of peak numbers. Nutritional indices (pregnancy rates, calf weights, and the prevalence of disease) have improved, and the population's age should no longer be skewed to older animals.
- 5. The importance of predation in affecting population growth harvest has increased the current low population size. The poor survival of calves and calf recruitment currently observed can be reasonably attributed to the influence of predation on caribou calves. A caribou calf mortality study conducted in May and June 2011 found that predation by bears and wolves accounted for 89% of the of calves that died between birth and 1 month of age. Fall calf:cow ratios in the MCH have averaged 22 calves:100 cows since 2005.
- 6. The low MCH caribou calf recruitment in Units 9B, 17, 18, 19A, and 19B has prevented recovery of the bull:cow ratio to objectives (3-year average bull:cow ratio = 19 bulls:100 cows between 2009 and 2011), a decrease in the number of harvestable caribou, a

complete closure of the nonresident season (closed in 2009), and season and bag-limit restrictions for resident hunters. The reduced recruitment and low bull numbers have resulted in a failure to provide for human needs.

- 7. The intensive management harvest objectives for the MCH in Units 9B, 17, 18, 19A, and 19B will not be achieved in the near future unless action is taken to improve calf survival and recruitment.
- 8. Increases in caribou recruitment and abundance in the MCH are achievable utilizing the recognized and prudent active management technique of predator control.
- 9. The harvest objectives have not been achieved, at least in part, because wolf and brown bear predation have been important causes of mortality in the population. Objectives are unlikely to be achieved in the foreseeable future unless predator control is conducted. Population objectives are currently being met, however, low recruitment precludes this population from meeting harvest objectives.
- 10. Reducing predation can reasonably be expected to achieve a sex and age structure that will sustain the population, provide for harvest, and allow growth toward objectives.

Vote: 7-0 March 9, 2012 Fairbanks, Alaska

Cliff Fuckins, Chairman Alaska Board of Game